

SHOW WORK AND/OR DRAW PICTURES IN ORDER TO RECEIVE FULL CREDIT.

1) Express  $80^\circ$  in radians.

2) Express  $\frac{3}{5}\pi$  in degrees.

In questions 3 & 4, find the least positive angle measurement that is coterminal to the given angle.

3)  $-\frac{5\pi}{6}$

4)  $-150^\circ$

In questions 5, 6, and 7 find the reference angle for the given angle.

5)  $-478^\circ$

6)  $287^\circ$

7)  $1080^\circ$

Find the exact values in questions 8 - 11.

8)  $\cos \pi$

9)  $\sin -\frac{7}{6}\pi$

10)  $\cos \frac{3\pi}{2}$

11)  $\cos 150^\circ$

12)  $\cot 300^\circ$

13)  $\tan 135^\circ$

14)  $\sec \frac{2}{3}\pi$

GRAPH the following:

15)  $y = 2\sin x$

16)  $y = \sin 2x$

17)  $y = -\tan x$

18)  $y = \cos x + 2$

19)  $y = \tan (x - 45^\circ)$

20)  $y = -3\sin(2x + 90^\circ) - 3$